

WHAT IS CLAIMED IS:

1. A printing apparatus which performs printing by using a printhead having a printing element for performing printing on a target printing medium,
5 comprising:
 - command generation means for outputting a command for causing the printhead to perform predetermined processing;
 - a carriage which supports the printhead and scans
10 the printhead on the target printing medium; and
 - control means, arranged on the said carriage, for receiving the command generated by said command generation means and outputting a control signal corresponding to the command to the printhead, thereby
15 controlling the printhead.
2. The apparatus according to claim 1, wherein
the printhead comprises storage means for storing feature information,
said command generation means outputs a command
20 for acquiring specific information from information held by the printhead, and
said control means receives the command generated by said command generation means, accesses the storage means of the printhead, and acquires specific
25 information corresponding to the command from the storage means.
3. The apparatus according to claim 2, wherein said

control means comprises

conversion means for converting the command generated by said command generation means into an access signal containing an address for reading out 5 information specified by the command from the storage means, and

acquisition means for accessing the storage means in response to the access signal obtained by the conversion means, and acquiring the specific 10 information.

4. The apparatus according to claim 3, wherein the conversion means has, in correspondence with each of a plurality of types of printheads, a table which makes the information specified by the command and a storage 15 address correspond to each other, and generates the access signal by looking up a table corresponding to a mounted printhead.

5. The apparatus according to claim 1, wherein the command generated by said command generation means 20 includes a command for driving and controlling the printhead.

6. The apparatus according to claim 1, wherein said command generation means is arranged in said carriage, interprets an input sequence instruction, generates a 25 command for causing the printhead to perform predetermined processing, and outputs the command to the printhead.

7. The apparatus according to claim 6, wherein said command generation means generates a second command on the basis of a result acquired from the printhead in accordance with a first command, and outputs the second command to the printhead.

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8. The apparatus according to claim 1, wherein the printing element has a heating element, and performs printing by discharging ink from an orifice arranged in correspondence with the heating element.

10 9. A printhead having a plurality of printing elements for performing printing, comprising:

reception means for receiving a command for causing the printhead to perform predetermined processing;

15 generation means for generating a control signal corresponding to the command received by said reception means; and

control means for performing control in accordance with the control signal generated by said 20 generation means.

10. The printhead according to claim 9, wherein the printhead further comprises storage means for storing feature information, and

said control means acquires specific information 25 from said storage means in accordance with the command, and externally outputs the specific information.

11. The printhead according to claim 10, wherein

5 said generation means comprises conversion means
for converting the command received by said reception
means into an access signal containing an address for
reading out information specified by the command from
said storage means, and

10 said control means accesses said storage means in
response to the access signal obtained by the
conversion means, and acquires corresponding specific
information.

15 12. The printhead according to claim 11, wherein the
conversion means has a table which makes the
information specified by the command and a storage
address in said storage means correspond to each other,
and generates the access signal by looking up the
table.

20 13. The printhead according to claim 9, wherein said
generation means generates a control signal for driving
and controlling the printhead on the basis of the
command received by said reception means.

25 14. The printhead according to claim 13, wherein said
generation means generates a second command on the
basis of a result of executing processing by said
control means in accordance with a generated first
command, and outputs the second command to said control
means.

15. The printhead according to claim 9, wherein a
heating element is used as the printing element, and

printing is performed by discharging ink from an orifice arranged in correspondence with the heating element.

16. An element base for a printhead having a plurality of printing elements for performing printing and a driving control circuit for selectively driving the plurality of printing elements, comprising:

reception means for receiving an externally input command; and

10 control means for performing control corresponding to the command received by said reception means.

17. A method of controlling a printing apparatus including a printhead having a printing element for performing printing and storage means for storing feature information, a first control unit which controls the printing apparatus, and a second control unit which is mounted on a cartridge for carrying the printhead or arranged in the printhead, and can operate independently of the first control unit, said method comprising:

a command generation step of causing the first control unit to generate a command for acquiring specific information from information held by the printhead; and

a control step of causing the second control unit to receive the command generated in the command

generation step, access the storage means of the printhead, and acquire the specific information corresponding to the command from the storage means.

18. The method according to claim 17, wherein the
5 second control means is arranged on an element base for
the printhead having the printing element for
performing printing in the printhead and the storage
means for storing feature information.

19. A liquid discharge apparatus which discharges a
10 liquid by using a liquid discharge head having a liquid
discharge element for discharging a liquid, comprising:
command generation means for outputting a command
for causing the liquid discharge head to perform
predetermined processing;

15 head mounting means for mounting the liquid
discharge head; and
control means, arranged on the said head mounting
means, for receiving the command generated by said
command generation means and outputting a control
20 signal corresponding to the command, thereby
controlling the liquid discharge head.

20. A liquid discharge head having a liquid discharge
element for discharging a liquid, comprising:
reception means for receiving a command for
25 causing the liquid discharge head to perform
predetermined processing;

generation means for generating a control signal

corresponding to the command received by said reception means; and

control means for performing control corresponding to the control signal generated by said generation means.

21. An element base for a liquid discharge head having a plurality of liquid discharge elements for discharging a liquid and a driving control circuit for selectively driving the plurality of liquid discharge elements, comprising:

reception means for receiving an externally input command; and

control means for performing control corresponding to the command received by said reception means.